



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,813	06/13/2005	Daisuke Matsumoto	10921.329USWO	9484
52835 7590 02/05/2009 HAMRE, SCHUMANN, MUELLER & LARSON, P.C. P.O. BOX 2902 MINNEAPOLIS, MN 55402-0902				
EXAMINER				
PANI, JOHN				
ART UNIT		PAPER NUMBER		
3736				
MAIL DATE		DELIVERY MODE		
02/05/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/538,813

**Applicant(s)**

MATSUMOTO ET AL.

**Examiner**

JOHN PANI

**Art Unit**

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3 and 5-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/14/2008 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 3, and 5-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

#### **In reference to Claim 1**

Line 1 recites "apparatus used for sampling"; line 4 recites "generator that generates"; line 7 recites "height detector detecting"; line 11 recites "controller executing"; line 13 recites "range being defined by granting"; line 14 recites "pressure that is set". It is unclear whether the invention is attempting to claim process steps within a claim directed to an apparatus, functions of which the apparatus is capable, etc.

This lack of clarity regarding the scope of the claim renders the claim indefinite. It is suggested to insert --is configured to-- or similar language prior to functional language in order to clarify that a controller is structurally limited to perform a task, for example --a controller configured to execute--. It is unclear what structure if any is performing the step of "defin[ing] by granting". It is unclear what structure if any is setting "a reference pressure" to "a lower value". It is unclear whether the control executed by the controller includes "after the height detector has detected that the skin has been raised to the predetermined height", or merely must be capable of happening after the height detector has detected the skin.

In reference to Claim 3

Line 3 recites "controller executes." It is unclear whether the invention is attempting to claim process steps within a claim directed to an apparatus, functions of which the apparatus is capable, etc. This lack of clarity regarding the scope of the claim renders the claim indefinite. It is suggested to insert --is configured to-- or similar language prior to functional language in order to clarify that a controller is structurally limited to perform a task. Lines 4-5 refer to "the pressure detector" which lacks antecedent basis in the claims.

In reference to Claim 5

Line 2 recites "limit which are set...." It is unclear whether the invention is attempting to claim process steps within a claim directed to an apparatus, functions of which the apparatus is capable, etc. This lack of clarity regarding the scope of the claim

renders the claim indefinite. It is unclear which structure if any is setting "an upper limit and a lower limit."

In reference to Claim 6

Line 3 recites "controller controls." It is unclear whether the invention is attempting to claim process steps within a claim directed to an apparatus, functions of which the apparatus is capable, etc. This lack of clarity regarding the scope of the claim renders the claim indefinite. It is suggested to insert --is configured to-- or similar language prior to functional language in order to clarify that a controller is structurally limited to perform a task. Line 4 recites "the predetermined level" which lacks antecedent basis in the claims.

In reference to Claims 8, 9, and 10

Line 2 of claims 8 and 9 and line 4 of claim 10 recite "controller controls". It is unclear whether the invention is attempting to claim process steps within a claim directed to an apparatus, functions of which the apparatus is capable, etc. This lack of clarity regarding the scope of the claim renders the claim indefinite. It is suggested to insert --is configured to-- or similar language prior to functional language in order to clarify that a controller is structurally limited to perform a task.

In reference to Claim 8

Line 2 recites "so as to maintain the contacting pressure within the specific range". It is unclear if "the specific range" refers to "a specific range" of claim 1 line 12, or a different range. It appears from the specification that it may be a second range,

because "the specific range" of claim 1 refers to an air pressure within the device, while claim 8 appears to be dealing with a contact pressure.

In reference to Claim 11

Line 2 recites "controller opens." It is unclear whether the invention is attempting to claim process steps within a claim directed to an apparatus, functions of which the apparatus is capable, etc. This lack of clarity regarding the scope of the claim renders the claim indefinite. It is suggested to insert --is configured to-- or similar language prior to functional language in order to clarify that a controller is structurally limited to perform a task.

In reference to Claims 14

Line 2 recites "detector that detects" and line 3 recites "valve opened or closed." It is unclear whether the invention is attempting to claim process steps within a claim directed to an apparatus, functions of which the apparatus is capable, etc. This lack of clarity regarding the scope of the claim renders the claim indefinite. It is suggested to insert --is configured to-- or similar language prior to functional language in order to clarify that a controller is structurally limited to perform a task.

In reference to Claim 16

Line 2 recites "detector that detects" and line 3 recites "generator decompresses." It is unclear whether the invention is attempting to claim process steps within a claim directed to an apparatus, functions of which the apparatus is capable, etc. This lack of clarity regarding the scope of the claim renders the claim indefinite. It is

suggested to insert --is configured to-- or similar language prior to functional language in order to clarify that a controller is structurally limited to perform a task.

In reference to Claim 17

Lines —3 recite “element that samples”. It is unclear whether the invention is attempting to claim process steps within a claim directed to an apparatus, functions of which the apparatus is capable, etc. This lack of clarity regarding the scope of the claim renders the claim indefinite. It is suggested to insert --is configured to-- or similar language prior to functional language in order to clarify that a controller is structurally limited to perform a task.

In reference to Claim 18

Line 2 recites “controller that controls”. It is unclear whether the invention is attempting to claim process steps within a claim directed to an apparatus, functions of which the apparatus is capable, etc. This lack of clarity regarding the scope of the claim renders the claim indefinite. It is suggested to insert --is configured to-- or similar language prior to functional language in order to clarify that a controller is structurally limited to perform a task.

In reference to Claim 21

Line 6 recites “generator that generates”; line 8 recites “detector that detects”; line 11 recites “detector that detects”; line 12 recites “controller that executes”; lines 14-15 recite “range being defined by granting”; line 16 recites “controller sets”. It is unclear whether the invention is attempting to claim process steps within a claim directed to an apparatus, functions of which the apparatus is capable, etc. This lack of clarity

regarding the scope of the claim renders the claim indefinite. It is suggested to insert -- is configured to-- or similar language prior to functional language in order to clarify that a controller is structurally limited to perform a task. It is unclear which structure if any is "defin[ing] by granting". It is unclear whether "after the height detector...predetermined height" is part of the executed control, or is a statement of intended use.

In reference to Claim 22

Line 2 recites "setting...is performed." It is unclear whether the invention is attempting to claim process steps within a claim directed to an apparatus, functions of which the apparatus is capable, etc. This lack of clarity regarding the scope of the claim renders the claim indefinite.

In reference to Claim 23

Line 2 recites "pressure is set". It is unclear whether the invention is attempting to claim process steps within a claim directed to an apparatus, functions of which the apparatus is capable, etc. This lack of clarity regarding the scope of the claim renders the claim indefinite. It is unclear which structure if any is setting "the reference pressure".

In reference to Claim 24

Line 2 recites "limit are set". It is unclear whether the invention is attempting to claim process steps within a claim directed to an apparatus, functions of which the apparatus is capable, etc. This lack of clarity regarding the scope of the claim renders the claim indefinite. It is unclear what structure if any is setting "the upper limit and a lower limit".



In reference to Claim 25

See 112 second paragraph rejection of claims 1 and 25.

In reference to Claim 26

Lines 13-14 recite "range is defined by granting...which is set". It is unclear whether the invention is attempting to claim process steps within a claim directed to an apparatus, functions of which the apparatus is capable, etc. This lack of clarity regarding the scope of the claim renders the claim indefinite. It is unclear which structure if any is "defin[ing] by granting" and which is setting "a reference pressure".

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 5, 6, 9, 10, 17-20, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/07599 to Takinami et al. ("Takinami") in view of US Pat. No. 4,600,403 to Wagner ("Wagner") and US Pat. No. 5,891,053 to Seseкура ("Seseкура"). However, US2003/0109808 is considered an English language equivalent by examiner and will be referred to heretofore. See MPEP s. 901.05(III) and 2131.01.

In reference to Claims 1, 25, and 26

Takinami teaches a lancing apparatus (1) used for sampling a body fluid out of a skin, the apparatus comprising a housing (2) including a cylindrical portion (5 and 13) adapted to be brought into contact with the skin, an insertion element (141) movable relative to the housing for sticking the skin, and a negative pressure generator (8) that generates a negative pressure inside the cylindrical portion to cause the skin to swell upward (See Fig. 17), and a pressure controller for executing a control so as to maintain a pressure inside the cylindrical portion within a specific range (less than the "predetermined pressure" and greater than "minimum pressure", see [0372-0387]). However, Takinami does not teach that the apparatus further comprises a detector that detects that the skin has been raised to a predetermined height inside the cylindrical portion, the height detector being provided separately from the insertion element and including a tapered face coming into contact with the skin when the skin swells upward.

Wagner teaches of a suction injector that uses vacuum in order to draw the skin up into a cylindrical channel so that a material can be injected into the skin through a cannula (see col. 7 lines 34-57). Wagner further teaches that injection could be triggered using a contact rod (i.e. touch sensor) that determines when the skin has reached a proper height. When the skin is at a proper height the contact rod operates a sensor switch (see col. 5 lines 16-22). The height detector (112) is provided separately from the insertion element (see Fig. 20). However, Wagner does not teach whether a tapered face is present on the height detector for coming into contact with the skin when the skin swells upward.

It would have been obvious to one having ordinary skill in the art at the time of invention to have modified the sampling device taught by Takinami by including a contact rod to determine when the skin has reached a proper height and thereby setting off a sensor switch as taught by Wagner, and further automating the process by sending this signal from the sensor switch to the controller taught by Takinami, as this would prevent the lancet from firing before the skin was in a proper position.

Sesekura teaches a blood collecting device which creates suction in order to create a bulge in the skin from which the blood is to be sampled. The portions (7) of the device which stop the bulge are tapered (see Fig. 2) in order to prevent excess pressure on the skin (col. 3 lines 30-33). It would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the device of Takinami in view of Wagner by forming a tapered skin contacting face on the height detector in order to prevent excessive pressure on the skin as taught by Sesekura.

The limitation "after the height detector has detected that the skin has been raised to the predetermined height" is not currently interpreted as rendering the claim unobvious, because the device of Takinami teaches that the device continues suction until after puncture, and therefore the device of Takinami in view of Wagner would be executing the control after the height detector of Takinami in view of Wagner triggered the puncturing. The limitation "the specific range being defined by granting a specific tolerance to a reference pressure that is set at a lower value than the pressure inside the cylindrical portion at a time that the height detector has detected that the skin has been raised to the predetermined height" has been interpreted as intended use, as the

claim does not positively state that a portion of the device conducts this step. Both "the predetermined pressure" and "minimum pressure" of Takinami are "set" at some point (see [0373] and [0387]). The "predetermined pressure" of Takinami and the "minimum pressure" define the specific range of Takinami. The "predetermined pressure" could be determined and set by determining the pressure at a time when the height detector detects that the skin has been raised to a predetermined height. The "specific tolerance" would be the difference between the "predetermined pressure" and the "minimum pressure".

In reference to Claim 3

Takinami in view of Wagner and Seseura teach the device of claim 1 (see above) and Takinami further teaches a pressure detector that detects a pressure inside the cylindrical portion, wherein the controller executes a control so as to maintain a pressure inside the cylindrical portion within a specific range, based on the pressure detected by the pressure detector (see [0372-0386]).

In reference to Claim 5

Takinami in view of Wagner and Seseura teach the device of claim 1 (see above) and Takinami further teaches the specific range has an upper limit ("predetermined pressure") and a lower limit ("minimum pressure"). The values are set at some point prior to use, and could have been set at a lower value than the pressure inside the cylindrical portion at a time the height detector detects that the skin has been raised to a predetermined height (i.e. if the device were used in this manner when the limits were set).

In reference to Claim 6

Takinami in view of Wagner and Seseekura teach the device of claim 1 (see above) and Wagner further teaches the height detector is capable of detecting a fluctuation of the swelling height of the skin (from not swollen to swollen), and Takinami teaches the controller controls the pressure inside the cylindrical portion. It is unclear what "predetermined level" is being claimed, but depending on the mechanical properties of the skin the device was used on, when "the predetermined pressure" of Takinami was applied and maintained, the swelling height would be maintained at a level predetermined by the mechanical properties of the skin.

In reference to Claim 9

Takinami in view of Wagner and Seseekura teach the device of claim 1 (see above) and Takinami teaches the controller controls the operation of the negative pressure generator so as to maintain a pressure inside the cylindrical portion within the specific range ([0372-386]).

In reference to Claim 10

Takinami in view of Wagner and Seseekura teach the device of claim 1 (see above) and Takinami further teaches a relief valve (26) located at a position (see Fig. 17) communicating with the inside of the cylindrical portion (5 and 13), wherein the controller (11) controls an opening and closing action (see [0378]) of the relief valve (26) so as to maintain the pressure (see [0408]) inside the cylindrical portion (5 and 13) within the specific range (see [0387]).

In reference to Claim 17

Takinami in view of Wagner and Seseura teach the device of claim 1 (see above) and Takinami further teaches that the cylindrical portion (5 and 13) includes an attachment base (13) to which is removably attached (The test paper could be removed by simply pulling it off, as it is fixed using a fixing portion 17, see [0183]) a sampling element (test paper 18) that samples a body fluid coming out of the skin by the insertion of the insertion element (see [0173]).

In reference to Claim 18

Takinami in view of Wagner and Seseura teaches an apparatus according to claim 1 (see above), and Takinami further teaches that the cylindrical portion (5 and 13) of the housing (2) includes a plurality of members (5 and 13), and one (13) or more of the members are removable from another (5) (see Fig. 3).

In reference to Claim 19

Takinami in view of Wagner and Seseura teaches an apparatus according to claim 1 (see above), and Takinami further teaches a controller (11) that controls an insertion depth into the skin based on a pressure inside the cylindrical portion (5 and 13) (The lancet only fires when the pressure is appropriate, thereby differentiating between no insertion depth and some insertion depth, see [0382]).

Takinami as modified by Wagner in claim 1 uses the height detector to determine when the skin has been raised to a predetermined height prior to lancing. Takinami maintains the pressure in the cylindrical portion from a time prior to lancing, during lancing, and after lancing (See Fig. 20). Therefore, Takinami in view of Wagner maintains the pressure within a specific range after the detector has detected that the

skin has been raised to the predetermined height, since the lancet is fired only after the height sensor is activated, and the controller maintains pressure after the lancet is fired.

In reference to Claim 20

Takinami in view of Wagner and Seseokura teaches an apparatus according to claim 1 (see above), and further teaches that the negative pressure generator (8) comprises an electric pump (see [0169]).

6. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takinami in view of Wagner and Seseokura as applied to claim 6 above, and further in view of Hodges.

In reference to Claim 7

Takinami in view of Wagner and Seseokura teaches an apparatus according to claim 6 (see above), and Takinami in view of Wagner further teaches a contacting member (The contact sensor rod taught by Wagner) for contact with the skin when the skin has been raised to the predetermined height, but the contacting member does not measure the contacting pressure of skin applied to the contacting member.

Hodges teaches of a body fluid sampling device that includes a pressure sensor for measuring the contact pressure between the device and the skin, as pressure on the sampling area can assist in extracting fluid (see col. 6 lines 32-39), and the pressure sensor assures that appropriate pressure has been applied.

It would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the device taught by Takinami in view of Wagner by

modifying the contact sensor rod so that it could also measure the contact pressure applied by the skin to the device, in order to assure that sufficient pressure was applied to assist in extracting fluid, as taught by Hodges.

In reference to Claim 8

Takinami in view of Wagner and Seseura and further in view of Hodges teaches an apparatus according to claim 7 (see above). It would have been further obvious to one having ordinary skill in the art at the time of the invention to have modified the device taught by Takinami in view of Wagner, Seseura, and Hodges so that the controller maintained the pressure in the cylindrical portion such that the contacting pressure stayed within a specific range. This would automate (see MPEP § 2144.04 (III)) the modification taught by Hodges (i.e., Hodges teaches that one would manually alter the pressure applied to the skin if it was not in the target range), and would thereby assure that sufficient pressure was applied to assist in extracting fluid, as taught by Hodges.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takinami in view of Wagner and Seseura as applied to claim 10 above, and further in view of US Pat. No. 4,548,205 to Armeniades et al. ("Armeniades").

Takinami in view of Wagner and Seseura teaches an apparatus according to claim 10 (see above) but do not explicitly teach that the controller opens the relief valve when the pressure inside the cylindrical portion becomes equal to or generally equal to a lower limit of the specific range. Armeniades teaches a suction device in which the



controller opens a relief valve if the pressure drops below a threshold in order to prevent tissue damage (see col. 5). It would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the device of Takinami by configuring the controller to open the relief valve if the pressure dropped below a minimum value in order to avoid tissue damage as taught by Armeniades.

8. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takinami in view of Wagner and Seseura as applied to claim 2 above, and further in view of Feingold.

In reference to Claim 12

Takinami in view of Wagner and Seseura teaches an apparatus according to claim 2 (see above), but does not teach a backup chamber into which a gas inside the cylindrical portion flows when the pressure inside the cylindrical portion becomes equal or generally equal to an upper limit of the specific range, after generation of a negative pressure inside the cylindrical portion by the negative pressure generator.

Feingold teaches of a positioning ring assembly 20 for holding onto an eyeball during surgery in which the vacuum pressure is supplied from a control unit 400 which includes a vacuum pump 420 connected to a vacuum reservoir 422. A valve 426 allows the vacuum stored in the reservoir 422 to be selectively released. The vacuum pressure in the reservoir is sensed by a vacuum transducer 424 (see col 4 lines 60-68).

It would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the device taught by Takinami by including a pressure

reservoir (i.e. backup chamber) between the pump and the cylindrical portion, and a valve to release the vacuum in the pressure reservoir, as taught by Feingold, so that the vacuum pump need not run constantly, as implicitly taught by Feingold. If the gas pressure in the suction cup section were greater than that in the reservoir, gas would flow into the reservoir.

In reference to Claim 13

Takinami in view of Wagner and Seseura and further in view of Feingold teaches an apparatus according to claim 12 (see above), and Takinami further teaches a gas supply selector (valve 26) controlled by the controller (11) to select (11 controls opening and closing of 26) whether to supply a gas into the cylindrical portion (When the valve is opened, air can flow in.)

In reference to Claim 14

Takinami in view of Wagner and Seseura and further in view of Feingold teaches an apparatus according to claim 13 (see above), and Takinami includes a cylindrical portion pressure detector (27) that detects pressure inside the cylindrical portion, wherein the gas supply selector comprises a relief valve (26) opened or closed according to a detecting result given by the cylindrical portion pressure detector (see [0373]).

In reference to Claim 15

Takinami in view of Wagner and Seseura and further in view of Feingold teaches an apparatus according to claim 12 (see above), and Feingold further teaches

that the backup chamber can be decompressed by the negative pressure generator (see col. 4 lines 60-67).

In reference to Claim 16

Takinami in view of Wagner and Seseura and further in view of Feingold teaches an apparatus according to claim 15 (see above), and Feingold further teaches a backup chamber pressure detector (424) that detects a pressure inside the backup chamber (vacuum reservoir 422), wherein the vacuum pump 420 decompresses 422 as needed based on feedback from 424 (see col. 4 lines 60-67).

***Response to Arguments***

9. Applicant's arguments with respect to claims 1, 3, 5-20, 25, and 26 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN PANI whose telephone number is (571)270-1996. The examiner can normally be reached on Monday-Friday 7:30 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JP 1/30/09

/Max Hindenburg/  
Supervisory Patent Examiner, Art Unit 3736